Experimental Cell Research

EDITOR-IN-CHIEF

N. Ringertz

ASSOCIATE EDITOR
FOR NORTH AMERICA

R. Baserga

Volume 225, 1996

Academic Press
San Diego New York Boston
London Sydney Tokyo Toronto

http://www.apnet.com

Copyright © 1996 by Academic Press, Inc.
All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (222 Rosewood Drive, Danvers, Massachusetts 01923), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1996 articles are as shown on the article title page; if no fee code appears on the title page, the copy fee is the same as for current articles.

0014-4827/96 $18.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

Contents of Volume 225

Number 1, May 25, 1996

MIKAEL NILSSON, HENRIK FAGMAN, AND LARS E. ERICSON. Ca^{2+}-Dependent and Ca^{2+}-Independent Regulation of the Thyroid Epithelial Junction Complex by Protein Kinases 1

MARI YAMAMOTO, HIROAKI NAKAMURA, MASAYUKI YAMATO, MASARU AOYAGI, AND KIYOTAKA YAMAMOTO. Retardation of Phenotypic Transition of Rabbit Arterial Smooth Muscle Cells in Three-Dimensional Primary Culture 12

NEIL C. TALBOT, THOMAS J. CAPERNA, LAURA T. LEBOW, DAVID MOSCIONI, VERNON G. PURSEL, AND CAIRD E. REXROAD, JR. Ultrastructure, Enzymatic, and Transport Properties of the PICM-19 Bipotent Liver Cell Line 22

STACY L. COSTA AND MICHAEL W. MCBURNEY. Dominant Negative Mutant of Retinoic Acid Receptorα Inhibits Retinoic Acid-Induced P19 Cell Differentiation by Binding to DNA 35

KRZYSZTOF REISS, WEI CHENG, ANTONIO GIORDANO, ANTONIO DE LUCA, BAOSHENG LI, JAN KAJSTURA, AND PIERO ANVERSA. Myocardial Infarction Is Coupled with the Activation of Cyclins and Cyclin-Dependent Kinases in Myocytes 44

MICHAEL P. MALESKI AND CHERYL B. KNUDSON. Hyaluronan-Mediated Aggregation of Limb Bud Mesenchyme and Mesenchymal Condensation during Chondrogenesis 55

CHRISTINE KNUEHL, ANGELA SEELIG, BARBARA BRECHT, PETER HENKLEIN, AND PETER-M. KLOETZEL. Functional Analysis of Eukaryotic 20S Proteasome Nuclear Localization Signal 67

HENRIK SÖDERQVIST, WEI-QIN JIANG, NILS RINGERTZ, AND EINAR HALLBERG. Formation of Nuclear Bodies in Cells Overexpressing the Nuclear Pore Protein POM121 75

TOMOHIKO OHTA, MAMORU FUKUDA, HAROLD J. WANEBO, KIYOKO JOGO, AND SUSUMU YAMAGUCHI. Behavior of the Cell Cycle-Associated Proteins in an Unusual G0-Arrestable Cancer Cell Line 85

EWA BORSUK, MARIA S. SZÖLLÖSI, DIDIER BESOMBES, AND PASCALE DEBEY. Fusion with Activated Mouse Oocytes Modulates the Transcriptional Activity of Introduced Somatic Cell Nuclei 93

JULIÀ BLANCO, ISABELLE MARIÉ, CHRISTIAN CALLEBAUT, ETIENNE JACOTOT, BERNARD KRUST, AND ARA G. HOVANESSIAN. Specific Binding of Adenosine Deaminase but Not HIV-1 Transactivator Protein Tat to Human CD26 102

JOACHIM D. MEIßNER, GREG A. BROWN, WALTER H. MUELLER, AND RENATE J. SCHEIBE. Retinoic Acid-Mediated Decrease of $G_{\alpha s}$ Protein Expression: Involvement of $G_{\alpha s}$ in the Differentiation of HL-60 Myeloid Cells 112

ALEKSANDER HINEK, SILVANA MOLOSSI, AND MARLENE RABINOVITCH. Functional Interplay between Interleukin-1 Receptor and Elastin Binding Protein Regulates Fibronectin Production in Coronary Artery Smooth Muscle Cells 122

DIANA JULIANO, YUQIN WANG, CEZARY MARCINKIEWICZ, LOUIS A. ROSENTHAL, GWENDOLYN J. STEWART, AND STEFAN NIEWIAROWSKI. Disintegrin Interaction with $\alpha_v\beta_3$ Integrin on Human Umbilical Vein Endothelial Cells: Expression of Ligand-Induced Binding Site on β_3 Subunit 132

KEIGO IWATA, NICOLA KOUTTAB, HARUKI OGATA, JOHN W. MORGAN, ABBY L. MAIZEL, AND STEPHEN R. LASKY. Differential Regulation of Vitamin D Receptors in Clonal Populations of a Chronic Myelogenous Leukemia Cell Line 143

B. Petit, K. Masuda, A. L. D'Souza, L. Otten, D. Pietryla, D. J. Hartmann, N. P. Morris, D. Uebelhart, T. M. Schmid, and E. J-M. A. Thonar. Characterization of Crosslinked Collagens Synthesized by Mature Articular Chondrocytes Cultured in Alginate Beads: Comparison of Two Distinct Matrix Compartments 151

Deborah S. Grove, Caren V. Crowl, Angelique Gagajewski, Chung-Shi Yang, Gongiti Ravindra Reddy, Gordon A. Hamilton, and Andrea M. Mastro. Inhibition of Proliferation and of IL-2 Production and Utilization in Lymphocytes by *S*-Oxalylglutathione 162

Siân E. Hughes. Functional Characterization of the Spontaneously Transformed Human Umbilical Vein Endothelial Cell Line ECV304: Use in an *in Vitro* Model of Angiogenesis 171

Patrick Erbacher, Annie Claude Roche, Michel Monsigny, and Patrick Midoux. Putative Role of Chloroquine in Gene Transfer into a Human Hepatoma Cell Line by DNA/Lactosylated Polylysine Complexes 186

Zoé Pettway, Miriam Domowicz, Nancy B. Schwartz, and Marianne Bronner-Fraser. Age-Dependent Inhibition of Neural Crest Migration by the Notochord Correlates with Alterations in the S103L Chondroitin Sulfate Proteoglycan 195

Catherine Gueth-Hallonet, Klaus Weber, and Mary Osborn. NuMA: A Bipartite Nuclear Location Signal and Other Functional Properties of the Tail Domain 207

Number 2, June 15, 1996

Review

John E. Hesketh. Sorting of Messenger RNAs in the Cytoplasm: mRNA Localization and the Cytoskeleton 219

Regular Articles

George G. Skouteris and Claus H. Schröder. *c-Myc* and *Max* Interactions in Quiescent and Mitogen-Stimulated Primary Hepatocytes 237

Isabelle Mercier, Jean-Pierre Lechaire, Alexis Desmouliere, Françoise Gaill, and Monique Aumailley. Interactions of Human Skin Fibroblasts with Monomeric or Fibrillar Collagens Induce Different Organization of the Cytoskeleton 245

Lorena Zentilin, Sabrina Tafuro, Gabriele Grassi, Rodolfo Garcia, Alessandro Ventura, Francisco Baralle, Arturo Falaschi, and Mauro Giacca. Functional Reconstitution of Oxidase Activity in X-Linked Chronic Granulomatous Disease by Retrovirus-Mediated Gene Transfer 257

V. Mouly, F. Edom, S. Decary, P. Vicart, J. P. Barbet, and G. S. Butler-Browne. SV40 Large T Antigen Interferes with Adult Myosin Heavy Chain Expression, but Not with Differentiation of Human Satellite Cells 268

Nikolai D. Belyaev, Ann M. Keohane, and Bryan M. Turner. Histone H4 Acetylation and Replication Timing in Chinese Hamster Chromosomes 277

Atika Belbrahem, Diana Godden-Kent, and Sibylle Mittnacht. Regulation and Activity of the Retinoblastoma Protein Family in Growth Factor-Deprived and TGFβ-Treated Keratinocytes 286

Dawn Coverley, Hannah R. Wilkinson, and C. Stephen Downes. A Protein Kinase-Dependent Block to Reinitiation of DNA Replication in G2 Phase in Mammalian Cells 294

MARC D. BASSON, GREGORY TUROWSKI, AND NANCY J. EMENAKER. Regulation of Human (Caco-2) Intestinal Epithelial Cell Differentiation by Extracellular Matrix Proteins 301

M. E. BECKNER, H. C. KRUTZSCH, S. KLIPSTEIN, S. T. WILLIAMS, J. E. MAGUIRE, M. DOVAL, AND L. A. LIOTTA. AAMP, a Newly Identified Protein, Shares a Common Epitope with α-Actinin and a Fast Skeletal Muscle Fiber Protein 306

PAOLA BARBORO, INGLES ALBERTI, PAOLA SANNA, SILVIO PARODI, CECILIA BALBI, CATERINA ALLERA, AND ELIGIO PATRONE. Changes in the Cytoskeletal and Nuclear Matrix Proteins in Rat Hepatocyte Neoplastic Nodules in Their Relation to the Process of Transformation 315

ALBERT B. REYNOLDS, JULIET M. DANIEL, YIN-YUAN MO, JING WU, AND ZHI ZHANG. The Novel Catenin p120^{cas} Binds Classical Cadherins and Induces an Unusual Morphological Phenotype in NIH3T3 Fibroblasts 328

MUSTAPHA OULAD-ABDELGHANI, PHILIPPE BOUILLET, CLAIRE CHAZAUD, PASCAL DOLLÉ, AND PIERRE CHAMBON. AP-2.2: A Novel AP-2-Related Transcription Factor Induced by Retinoic Acid during Differentiation of P19 Embryonal Carcinoma Cells 338

XIAO-PING SHI, KUO-CHANG YIN, ZORAN A. ZIMOLO, ANDREW M. STERN, AND LLOYD WAXMAN. The Subcellular Distribution of Eukaryotic Translation Initiation Factor, eIF-5A, in Cultured Cells 348

SOLOMON MPOKE AND JASON WOLFE. DNA Digestion and Chromatin Condensation during Nuclear Death in *Tetrahymena* 357

PENELOPE J. OWEN, GERALD D. JOHNSON, AND JANET M. LORD. Protein Kinase C-δ Associates with Vimentin Intermediate Filaments in Differentiated HL60 Cells ... 366

W. STEPHEN KISTLER, KENTH HENRIKSÉN, PEKKA MALI, AND MARTTI PARVINEN. Sequential Expression of Nucleoproteins during Rat Spermiogenesis 374

YIZHENG WANG, HERBERT SCHRAMEK, AND MICHAEL J. DUNN. Cytosolic and Nuclear Mitogen-Activated Protein Kinases Are Regulated by Distinct Mechanisms 382

VALYA T. MIKHAYLOVA, MARC THIRY, ELENA STEPHANOVA, GUY GOESSENS, AND DIMITER V. MARKOV. Localization of Nucleic Acids in Hepatocyte Nucleoli of Rats upon D-Galactosamine-Induced Block of Transcription 389

JEAN-CHARLES GANDER, VASILLIS GOTZOS, BENOÎT FELLAY, AND BEAT SCHWALLER. Inhibition of the Proliferative Cycle and Apoptotic Events in WiDr Cells after Down-Regulation of the Calcium-Binding Protein Calretinin Using Antisense Oligodeoxynucleotides 399

NORBERT WALTHER, MARTINA JANSEN, SÜLEYMAN ERGÜN, BERND KASCHEIKE, AND RICHARD IVELL. Sertoli Cell Lines Established from *H-2K^b*-tsA58 Transgenic Mice Differentially Regulate the Expression of Cell-Specific Genes 411

AXEL U. DIGNASS AND DANIEL K. PODOLSKY. Interleukin 2 Modulates Intestinal Epithelial Cell Function *in Vitro* 422

JASON E. REYNOLDS, JINFANG LI, RUTH W. CRAIG, AND ALAN EASTMAN. BCL-2 and MCL-1 Expression in Chinese Hamster Ovary Cells Inhibits Intracellular Acidification and Apoptosis Induced by Staurosporine 430

Author Index for Volume 225 437

NOTICE

The Subject Index for Volume 225 will appear in the December 15, 1996, issue as part of a cumulative index for the year 1996.